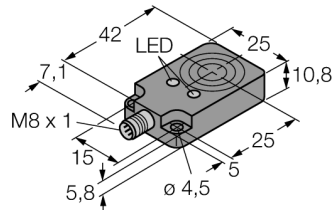


Inductive sensor BI8-Q10-VP6X2-V1141

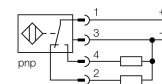
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- Rectangular, height 10.8 mm
- Active face on top
- Plastic, PBT-GF30-V0
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- M8 x 1 male connector

Wiring Diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Type designation	BI8-Q10-VP6X2-V1141
Ident-No.	4616402
Rated switching distance Sn	8 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \%$ U_{ss}
DC rated operational current	$\leq 200 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes/ Cyclic
Voltage drop at I_0	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
Switching frequency	0.25 kHz
Design	Rectangular, Q10
Dimensions	42 x 25 x 10.8 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Connector, M8 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Yellow

Inductive sensor BI8-Q10-VP6X2-V1141

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Distance D	$2 \times B$
Distance W	$3 \times S_n$
Distance S	$1 \times B$
Distance G	$6 \times S_n$

Width active area B	25 mm
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